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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,957	04/11/2008	Valerie Petay	033339/301225	1635

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EXAMINER	
TONGUE, LAKIA J	

ART UNIT	PAPER NUMBER
1645	

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12/07/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,957	PETAY ET AL.	
	Examiner	Art Unit	
	LAKIA J. TONGUE	1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 September 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

FINAL ACTION

1. The amendment filed on September 20, 2010 is acknowledged. Claims 1, 8, 9, 24 and 25 have been amended. Claims 1-25 are pending and under examination.

Objections Withdrawn

2. In view of Applicant's amendment to the specification, the objection to the specification for the use of multiple trademarks is withdrawn.

3. In view of Applicant's amendments to the claims, the objection to claims 8, 9, 24 and 25 because it was not clear as to whether or not Applicant intended to have claims 8, 9, 24 and 25 recite a Markush group is withdrawn.

4. Upon further consideration, the objection to claim 21 as being objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim is withdrawn.

Rejections Withdrawn

5. In view of Applicant's amendment, the rejection of claim 1 for being vague and indefinite by the use of the terms "*Bifidobacterium breve* I-2219" is withdrawn.

Rejections Maintained

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. The rejection of claims 1-25 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention is maintained for the reasons set forth in the previous office action.

Applicant argues that:

1) The microorganism in question has been deposited under the Budapest Treaty and Timothy Balts has attested via a statement satisfying the deposit requirement under 37 C.F.R. § 1.808 that the deposit fully meet the requirements of 37 C.F.R. § 1.806-808.

Applicant's arguments have been fully considered but are non-persuasive.

With regard to Point 1, Mr. Timothy Balts statements have been considered and are acknowledged. However, Applicant has not provided a copy of the deposit receipt and/or the contract with the depository for deposit and maintenance of said deposit with the submission of said statements.

As previously presented, claims 1-25 are drawn to an immunomodulatory product, obtained according to a method of preparation comprising the following steps: inoculation and incubation, under aerobic or anaerobic conditions and at a temperature of between approximately 30 and 40°C, of Bifidobacterium comprising at least the strain

Bifidobacterium breve I-2219 in an aqueous substrate having a pH of between approximately 6 and 8 and comprising at least the following ingredients: i) lactoserum permeate, ii) a lactoserum protein hydrolyzate, iii) lactose, removal of the Bifidobacterium from the aqueous substrate; ultrafiltration of the aqueous substrate through filtration membranes having a cut-off threshold of between 100 and 300 kDa, so as to obtain a concentrated retentate; dehydration of the concentrated retentate, dissolution of the dehydrated retentate in a buffer; gel exclusion chromatography of the retentate solution, on a column having an exclusion threshold of 600 kDa; recovery of the excluded fraction at the end of the chromatography, which fraction constitutes the immunomodulatory product.

Because it is not clear that cell lines possessing the properties of ***Bifidobacterium breve* I-2219** are known and publicly available or can be reproducibly isolated from nature without undue experimentation and because the claims require the use of a suitable deposit for patent purposes a deposit in a public repository is required. Without a publicly available deposit of the above ***Bifidobacterium breve* I-2219**, one of ordinary skill in the art could not be assured of the ability to practice the invention as claimed. Exact replication of the cell line is an unpredictable event.

Applicant's referral to the deposit of ***Bifidobacterium breve* I-2219 on page 2, lines 30-36 and page 3, lines 1-4** of the specification is an insufficient assurance that all required deposits have been made and all the conditions of 37 CFR 1.801-1.809 have been met.

If the deposit has been made under the provisions of the Budapest Treaty, filing of an affidavit or declaration by applicant or assignees or a statement by an attorney of record who has authority and control over the conditions of deposit over his or her signature and registration number stating that the deposit has been accepted by the International Depository Authority under the provisions of the Budapest Treaty and that all restrictions upon public access to the deposit will be irrevocably removed upon the grant of a patent on this application. These requirements are necessary when deposits are made under the provisions of the Budapest Treaty as the Treaty leaves this specific matter to the discretion of each State. Amendment of the specification to recite the date

of the deposit and the complete name and full street address of the depository is required.

If the deposits have not been made under the provisions of the Budapest Treaty, then in order to certify that the deposits comply with the criteria set forth in 37 CFR 1.801-1.809, assurances regarding availability and permanency of deposits are required. Such assurance may be in the form of an affidavit or declaration by applicants or assignees or in the form of a statement by an attorney of record who has the authority and control over the conditions of deposit over his or her signature and registration number averring: (a) during the pendency of this application, access to the deposits will be afforded to the Commissioner upon request; (b) all restrictions upon the availability to the public of the deposited biological material will be irrevocably removed upon the granting of a patent on this application; (c) the deposits will be maintained in the public repository for a period of at least thirty years from the date of deposit or for the enforceable life of the patent of or for a period of five years after the date of the most recent request for the furnishing of a sample of the deposited biological material, whichever is longest; and (d) the deposits will be replaced if they should become nonviable or non-replicable.

In addition, a deposit of biological material that is capable of self-replication either directly or indirectly must be viable at the time of deposit and during the term of deposit. Viability may be tested by the repository. The test must conclude only that the deposited material is capable of reproduction. A viability statement for each deposit of biological material not made under the Budapest Treaty must be filed in the application and must contain: 1) The name and address of the depository; 2) The name and address of the depositor; 3) The date of deposit; 4) The identity of the deposit and the accession number given by the depository; 5) The date of the viability test; 6) The procedures used to obtain a sample if test is not done by the depository; and 7) A statement that the deposit is capable of reproduction. As well as a statement that removes restrictions to provide access to this strain upon granting of a patent has not made, either in the instant Specification, nor in Applicant's Remarks.

One of the critical conditions of Deposit is defined in 37 CFR 1.808 requires that the deposit of biological material be made under two conditions: (A) access to the deposit will be available during pendency of the patent application making reference to the deposit to one determined by the Commissioner to be entitled thereto under 37 CFR 1.14 and 35 U.S.C. 122, and (B) with one exception, that all restrictions imposed by the depositor on the availability to the public of the deposited biological material be irrevocably removed upon the granting of the patent. Upon making this statement, the rejection under 35 USC 112, first paragraph will be withdrawn. This rejection can be obviated through perfection of the Deposit and amendment of the claims to clearly set forth the Deposited strains.

As a possible means for completing the record, applicant may submit a copy of the contract with the depository for deposit and maintenance of each deposit.
If the deposit was made after the effective filing date of the application for patent in the United States, a verified statement is required from a person in a position to corroborate that the ***Bifidobacterium breve* I-2219** described in the specification as filed is the same as that deposited in the depository. Corroboration may take the form of a showing a chain of custody from applicant to the depository coupled with corroboration that the deposit is identical to the biological material described in the specification and in the applicant's possession at the time the application was filed.

Applicant's attention is directed to In re Lundack, 773 F.2d.1216, 227 USPQ (CAFC 1985) and 37 CFR 1.801-1.809 for further information concerning deposit practice.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated

by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. The rejection of claims 1-25 for being provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 6 of copending Application No. 12/167,630 (US 2008/0268099 A1) is maintained for the reasons set forth in the previous office action.

Applicants request that the rejection be held in abeyance until after the Examiner has withdrawn all prior rejections.

In response to Applicant's request, the Examiner will maintain the rejection until a Terminal Disclaimer has been provided.

As previously presented, although the conflicting claims are not identical, they are not patentably distinct from each other because the pending claims of the instant application are drawn to an immunomodulatory product, obtained according to a method of preparation comprising the following steps: inoculation and incubation, under aerobic or anaerobic conditions and at a temperature of between approximately 30 and 40°C, of Bifidobacterium comprising at least the strain *Bifidobacterium breve* I-2219 in an aqueous substrate having a pH of between approximately 6 and 8 and comprising at least the following ingredients: i) lactoserum permeate, ii) a lactoserum protein hydrolyzate, iii) lactose, removal of the Bifidobacterium from the aqueous substrate;

ultrafiltration of the aqueous substrate through filtration membranes having a cut-off threshold of between 100 and 300 kDa, so as to obtain a concentrated retentate; dehydration of the concentrated retentate, dissolution of the dehydrated retentate in a buffer; gel exclusion chromatography of the retentate solution, on a column having an exclusion threshold of 600 kDa; recovery of the excluded fraction at the end of the chromatography, which fraction constitutes the immunomodulatory product. The Examiner is interpreting the obtained by recitations as product by process limitations and thus the claims are drawn to Bifidobacterium comprising at least the strain *Bifidobacterium breve* I-2219. Claim 6 of the co-pending application is drawn to the *Bifidobacterium breve* strain I-2219 deposited at the CNCM on May 31, 1999, thus meeting the limitation of the pending claims. Moreover, the disclosure of the co-pending application is obvious over the instant claims because it discloses that said deposited strain may be consumed as is or as a ready to eat product such as a milk product, an infant food product, or as food for subjects of all ages (see paragraphs 0028-0032 and 0035).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The rejection of claims 1-25 under 35 U.S.C. 102(e) as being anticipated by Blareau et al. (U.S. 2008/0268099 A1; Filing date: 4/2/02) is maintained for the reasons set forth in the previous office action.

The applied reference has a common Inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Applicant argues that:

1) Blareau does not teach to remove the bacteria or to extract a specific fraction of the obtained culture broth.

2) The peptide corresponding to SEQ ID NO: 1, 2 and 3 are obtained after the removal of *Bifidobacterium breve* strain I-2219 from the aqueous substrate; as such these peptides are present in the substrate and not in the strain.

3) The method described in Blareau uses a different substrate than the method of the claimed invention; the obtained immunomodulatory products are necessarily different.

4) Example 2 of the present application shows the major influence of the substrate's composition on the composition of the obtained fraction, which is demonstrated by E1 and E2 in Table 1. The example confirms that the composition of the substrate on which the *Bifidobacterium breve* I-2219 is cultured has a significant influence on the composition of the product obtained after culturing *Bifidobacterium breve* I-2219.

5) The last step in the extraction leads to a concentrated immunomodulatory product; consequently, the product obtained in accordance with Blareau has a different composition and is less concentrated than the product of the claimed invention.

Applicant's arguments have been fully considered, but are non-persuasive.

Claims 1-25 are drawn to an immunomodulatory product, obtained according to a method of preparation comprising the following steps: inoculation and incubation, under aerobic or anaerobic conditions and at a temperature of between approximately 30 and 40°C, of Bifidobacterium comprising at least the strain *Bifidobacterium breve* I-2219 with the CNCM (Collection Nationale De Cultures de Microorganisms in Paris France) in an aqueous substrate having a pH of between approximately 6 and 8 and comprising at least the following ingredients: i) lactoserum permeate, ii) a lactoserum protein hydrolyzate, iii) lactose, removal of the Bifidobacterium from the aqueous substrate; ultrafiltration of the aqueous substrate through filtration membranes having a cut-off threshold of between 100 and 300 kDa, so as to obtain a concentrated retentate; dehydration of the concentrated retentate, dissolution of the dehydrated retentate in a buffer; gel exclusion chromatography of the retentate solution, on a column having an

exclusion threshold of 600 kDa; recovery of the excluded fraction at the end of the chromatography, which fraction constitutes the immunomodulatory product.

With regard to Point 1, the claims as drafted, while they include method steps for obtaining a product, are essentially drawn to an immunomodulatory product comprising *Bifidobacterium breve* strain I-2219. Moreover, for sake of argument, the prior art discloses the use of *Bifidobacterium breve* strain I-2219 as a whole, said Bifidobacterium, absent evidence to the contrary, would necessarily encompass a specific fraction of the organism.

With regard to Point 2, the claims recite that the protein fraction comprises at least one peptide corresponding to at least SEQ ID NO: 1, 2 or 3. Applicant submits that the peptide was obtained from the strain after the removal of *Bifidobacterium breve* strain I-2219 from the aqueous substrate; ultimately, the peptide is obtained from said strain. Blareau et al. disclose an identical strain to that which has been claimed, absent evidence to the contrary, said *Bifidobacterium breve* strain I-2219 necessarily comprises at least one peptide corresponding to SEQ ID NOs: 1, 2 and 3.

With regard to Point 3, contrary to Applicant's assertion, the use of a different substrate does not necessarily change the final product. If the end product is different then the claimed product, Applicant must provide evidence to clearly demonstrate the difference. Moreover, Applicant is reminded that the claims are drawn to a product, therefore, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-

process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

With regard to Point 4, while E1 and E2 may demonstrate an influence, i.e. a slight change in the amount of glactose, mannose, glucose, N-acetylgalactosamine, N-acetylglucosamine, neuraminic acid or rhamnose, on the substrate, as demonstrated in Table 1, the *Bifidobacterium breve* I-2219 strain itself, absent evidence to the contrary, should remain identical to the strain of the prior art and not change structurally due to the minute change in the amount of glactose, mannose, glucose, N-acetylgalactosamine, N-acetylglucosamine, neuraminic acid or rhamnose.

With regard to Point 5, the claims are drawn to a product comprising *Bifidobacterium breve* I-2219. The claims are crafted in a way which defines the process by which the product is obtained. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the composition is less concentrated) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Moreover, Applicant must provide evidence to the contrary that the compositions of the prior art and the composition of the claimed invention are not identical. Moreover, Applicant's assertions comprise only attorney's argument; said argument cannot be considered evidence unless it is an admission, in which case, an examiner may use the

admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art. Additionally, the arguments of counsel cannot take the place of evidence in the record. In re Schulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); In re Geisler, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness."). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration MPEP 2145.

As previously presented, Blareau et al. disclose the use of *Bifidobacterium breve* strain I-2219 (see paragraph 0020). Blareau et al. disclose that the product may be consumed as is or as a ready to eat product such as a milk product, an infant food product, or as food for subjects of all ages (see paragraphs 0028-0032 and 0035). Blareau et al. disclose the same strain as that which has been claimed, said *Bifidobacterium breve* strain I-2219 inherently comprises at least one peptide corresponding to SEQ ID NOs: 1, 2 and 3.

With regard to claims 1-17, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Since the Office does not have the facilities for examining and comparing applicants' composition with the composition of the prior art, the burden is on applicant to show a novel or unobvious difference between the claimed product and the prior art. See In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and In re Fitzgerald et al., 205 USPQ 594.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. The rejection of claims 1-25 under 35 U.S.C. 102(e) as being anticipated by Blareau et al. (U.S. Patent 7,410,653 B1; Filing date: 4/2/02) is maintained for the reasons set forth in the previous office action.

The applied reference has a common Inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Applicant argues that:

1) Blareau does not teach to remove the bacteria or to extract a specific fraction of the obtained culture broth.

2) The peptide corresponding to SEQ ID NO: 1, 2 and 3 are obtained after the removal of *Bifidobacterium breve* strain I-2219 from the aqueous substrate; as such these peptides are present in the substrate and not in the strain.

3) The method described in Blareau uses a different substrate than the method of the claimed invention; the obtained immunomodulatory products are necessarily different.

4) Example 2 of the present application shows the major influence of the substrate's composition on the composition of the obtained fraction, which is demonstrated by E1 and E2 in Table 1. The example confirms that the composition of the substrate on which the *Bifidobacterium breve* I-2219 is cultured has a significant influence on the composition of the product obtained after culturing *Bifidobacterium breve* I-2219.

5) The last step in the extraction leads to a concentrated immunomodulatory product; consequently, the product obtained in accordance with Blareau has a different composition and is less concentrated than the product of the claimed invention.

Applicant's arguments have been fully considered, but are non-persuasive.

Claims 1-25 are drawn to an immunomodulatory product, obtained according to a method of preparation comprising the following steps: inoculation and incubation, under aerobic or anaerobic conditions and at a temperature of between approximately 30 and 40°C, of Bifidobacterium comprising at least the strain *Bifidobacterium breve* I-2219 with the CNCM (Collection Nationale De Cultures de Microorganisms in Paris France) in an aqueous substrate having a pH of between approximately 6 and 8 and comprising at

least the following ingredients: i) lactoserum permeate, ii) a lactoserum protein hydrolyzate, iii) lactose, removal of the Bifidobacterium from the aqueous substrate; ultrafiltration of the aqueous substrate through filtration membranes having a cut-off threshold of between 100 and 300 kDa, so as to obtain a concentrated retentate; dehydration of the concentrated retentate, dissolution of the dehydrated retentate in a buffer; gel exclusion chromatography of the retentate solution, on a column having an exclusion threshold of 600 kDa; recovery of the excluded fraction at the end of the chromatography, which fraction constitutes the immunomodulatory product.

With regard to Point 1, the claims as drafted, while they include method steps for obtaining a product, are essentially drawn to an immunomodulatory product comprising *Bifidobacterium breve* strain I-2219. Moreover, for sake of argument, the prior art discloses the use of *Bifidobacterium breve* strain I-2219 as a whole, said Bifidobacterium, absent evidence to the contrary, would necessarily encompass a specific fraction of the organism.

With regard to Point 2, the claims recite that the protein fraction comprises at least one peptide corresponding to at least SEQ ID NO: 1, 2 or 3. Applicant submits that the peptide was obtained from the strain after the removal of *Bifidobacterium breve* strain I-2219 from the aqueous substrate; ultimately, the peptide is obtained from said strain. Blareau et al. disclose an identical strain to that which has been claimed, absent evidence to the contrary, said *Bifidobacterium breve* strain I-2219 necessarily comprises at least one peptide corresponding to SEQ ID NOs: 1, 2 and 3.

With regard to Point 3, contrary to Applicant's assertion, the use of a different substrate does not necessarily change the final product. If the end product is different then the claimed product, Applicant must provide evidence to clearly demonstrate the difference. Moreover, Applicant is reminded that the claims are drawn to a product, therefore, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

With regard to Point 4, while E1 and E2 may demonstrate an influence, i.e. a slight change in the amount of glactose, mannose, glucose, N-acetylgalactosamine, N-acetylglucosamine, neuraminic acid or rhamnose, on the substrate, as demonstrated in Table 1, the *Bifidobacterium breve* I-2219 strain itself, absent evidence to the contrary, should remain identical to the strain of the prior art and not change structurally due to the minute change in the amount of glactose, mannose, glucose, N-acetylgalactosamine, N-acetylglucosamine, neuraminic acid or rhamnose.

With regard to Point 5, the claims are drawn to a product comprising *Bifidobacterium breve* I-2219. The claims are crafted in a way which defines the process by which the product is obtained. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the composition is less concentrated) are not

recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Moreover, Applicant must provide evidence to the contrary that the compositions of the prior art and the composition of the claimed invention are not identical. Moreover, Applicant's assertions comprise only attorney's argument; said argument cannot be considered evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art. Additionally, the arguments of counsel cannot take the place of evidence in the record. In re Schulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); In re Geisler, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness."). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration MPEP 2145.

As previously presented, Blareau et al. disclose the use of *Bifidobacterium breve* strain I-2219 (see column 2, lines 42-47). Blareau et al. disclose that the product may be consumed as it is or as a ready to eat product (see column 2, lines 64-66). Moreover, Blareau et al. disclose that the strain is suitable for use as a milk product, infant food, or as food for subjects of all ages (see column 3, lines 34-36 and 39). Blareau et al. disclose the same strain as that which has been claimed, said *Bifidobacterium breve* strain I-2219 inherently comprises at least one peptide corresponding to SEQ ID NOs: 1, 2 and 3.

With regard to claims 1-17, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product

itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Since the Office does not have the facilities for examining and comparing applicants' composition with the composition of the prior art, the burden is on applicant to show a novel or unobvious difference between the claimed product and the prior art. See In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and In re Fitzgerald et al., 205 USPQ 594.

10. The rejection of claims 1-25 under 35 U.S.C. 102(b) as being anticipated by Blareau et al. (WO 01/01785; Publication date: 1/11/01) is maintained for the reasons set forth in the previous office action.

Please note this rejection is being made over WO 01/01785, which has not been translated, but the translated equivalent is US 7,410,653 B1, which is the national stage for the international application and has been applied above under 35 U.S.C. 102(e).

Applicant argues that:

1) Blareau does not teach to remove the bacteria or to extract a specific fraction of the obtained culture broth.

2) The peptide corresponding to SEQ ID NO: 1, 2 and 3 are obtained after the removal of *Bifidobacterium breve* strain I-2219 from the aqueous substrate; as such these peptides are present in the substrate and not in the strain.

3) The method described in Blareau uses a different substrate than the method of the claimed invention; the obtained immunomodulatory products are necessarily different.

4) Example 2 of the present application shows the major influence of the substrate's composition on the composition of the obtained fraction, which is demonstrated by E1 and E2 in Table 1. The example confirms that the composition of the substrate on which the *Bifidobacterium breve* I-2219 is cultured has a significant influence on the composition of the product obtained after culturing *Bifidobacterium breve* I-2219.

5) The last step in the extraction leads to a concentrated immunomodulatory product; consequently, the product obtained in accordance with Blareau has a different composition and is less concentrated than the product of the claimed invention.

Applicant's arguments have been fully considered, but are non-persuasive.

Claims 1-25 are drawn to an immunomodulatory product, obtained according to a method of preparation comprising the following steps: inoculation and incubation, under aerobic or anaerobic conditions and at a temperature of between approximately 30 and 40°C, of Bifidobacterium comprising at least the strain *Bifidobacterium breve* I-2219 with the CNCM (Collection Nationale De Cultures de Microorganisms in Paris France) in an aqueous substrate having a pH of between approximately 6 and 8 and comprising at least the following ingredients: i) lactoserum permeate, ii) a lactoserum protein hydrolyzate, iii) lactose, removal of the Bifidobacterium from the aqueous substrate; ultrafiltration of the aqueous substrate through filtration membranes having a cut-off

threshold of between 100 and 300 kDa, so as to obtain a concentrated retentate; dehydration of the concentrated retentate, dissolution of the dehydrated retentate in a buffer; gel exclusion chromatography of the retentate solution, on a column having an exclusion threshold of 600 kDa; recovery of the excluded fraction at the end of the chromatography, which fraction constitutes the immunomodulatory product.

With regard to Point 1, the claims as drafted, while they include method steps for obtaining a product, are essentially drawn to an immunomodulatory product comprising *Bifidobacterium breve* strain I-2219. Moreover, for sake of argument, the prior art discloses the use of *Bifidobacterium breve* strain I-2219 as a whole, said Bifidobacterium, absent evidence to the contrary, would necessarily encompass a specific fraction of the organism.

With regard to Point 2, the claims recite that the protein fraction comprises at least one peptide corresponding to at least SEQ ID NO: 1, 2 or 3. Applicant submits that the peptide was obtained from the strain after the removal of *Bifidobacterium breve* strain I-2219 from the aqueous substrate; ultimately, the peptide is obtained from said strain. Blareau et al. disclose an identical strain to that which has been claimed, absent evidence to the contrary, said *Bifidobacterium breve* strain I-2219 necessarily comprises at least one peptide corresponding to SEQ ID NOs: 1, 2 and 3.

With regard to Point 3, contrary to Applicant's assertion, the use of a different substrate does not necessarily change the final product. If the end product is different then the claimed product, Applicant must provide evidence to clearly demonstrate the difference. Moreover, Applicant is reminded that the claims are drawn to a product,

therefore, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

With regard to Point 4, while E1 and E2 may demonstrate an influence, i.e. a slight change in the amount of glactose, mannose, glucose, N-acetylgalactosamine, N-acetylglucosamine, neuraminic acid or rhamnose, on the substrate, as demonstrated in Table 1, the *Bifidobacterium breve* I-2219 strain itself, absent evidence to the contrary, should remain identical to the strain of the prior art and not change structurally due to the minute change in the amount of glactose, mannose, glucose, N-acetylgalactosamine, N-acetylglucosamine, neuraminic acid or rhamnose.

With regard to Point 5, the claims are drawn to a product comprising *Bifidobacterium breve* I-2219. The claims are crafted in a way which defines the process by which the product is obtained. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the composition is less concentrated) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Moreover, Applicant must provide evidence to the contrary that the compositions of the prior art and the composition of the claimed invention are not identical. Moreover, Applicant's assertions comprise only attorney's argument; said argument cannot be considered evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art. Additionally, the arguments of counsel cannot take the place of evidence in the record. In re Schulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); In re Geisler, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness."). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration MPEP 2145.

As previously presented, Blareau et al. disclose the use of *Bifidobacterium breve* strain I-2219 (see column 2, lines 42-47). Blareau et al. disclose that the product may be consumed as it is or as a ready to eat product (see column 2, lines 64-66). Moreover, Blareau et al. disclose that the strain is suitable for use as a milk product, infant food, or as food for subjects of all ages (see column 3, lines 34-36 and 39). Blareau et al. disclose the same strain as that which has been claimed, said *Bifidobacterium breve* strain I-2219 inherently comprises at least one peptide corresponding to SEQ ID NOs: 1, 2 and 3.

With regard to claims 1-17, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a

different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Since the Office does not have the facilities for examining and comparing applicants' composition with the composition of the prior art, the burden is on applicant to show a novel or unobvious difference between the claimed product and the prior art. See In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and In re Fitzgerald et al., 205 USPQ 594.

Conclusion

11. No claim is allowed.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAKIA J. TONGUE whose telephone number is (571)272-2921. The examiner can normally be reached on Monday-Friday 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Duffy can be reached on 571-272-0855. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJT
11/24/10

/Vanessa L. Ford/
Primary Examiner, Art Unit 1645